

**Claims**

1. A method for extraction and concentration of hydrophilic compounds dispersed or distributed in hydrophobic liquid matrices comprising the following steps:
- 5           a) providing a sample of a hydrophobic liquid;
- b) adding an aqueous capture solution containing at least one extractant to said sample;
- c) mixing said sample and said capture solution thoroughly;
- d) allow the aqueous phase to separate from the sample phase;
- 10           e) measure the compound in the aqueous phase.
2. An aqueous capture solution containing at least one extractant, said extractant in said capture solution improving the yield of a hydrophilic compound extracted from a hydrophobic matrix.
- 15           3. A capture solution according to claim 2, wherein said extractant is selected out of the group consisting of amphoteric or anionic phospholipids and anionic surfactants.
- 20           4. A capture solution according to claim 3, wherein said extractant is a lecithin.
5. A capture solution according to at least one of the claims 2 to 4 containing more than one extractant.
- 25           6. A capture solution according to at least one of the claims 2 to 5 containing a non-ionic surfactant in addition to the extractant(s).
7. A capture solution according to at least one of the claims 2 to 6 containing a water-soluble dye in an amount to allow good visibility of the aqueous phase.
- 30

8. A reagent kit for extracting a hydrophilic compound from a hydrophobic matrix and detection of said hydrophilic compound comprising a capture solution according to at least one of the claims 2 to 7.

5

10

15

20

25

30